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The lost formulae to inspiring students

Dr. Aftab A. Dean (Leeds Business School)

Academic tutors take on a multitude of roles in their current positions at university and while teaching is expected, from most, it is often assumed that the tutor will apply appropriate pedagogical tools to convey knowledge to the students. This view is now being challenged as many students are being actively encouraged to voice their views of the teaching and learning experience, for the module and the university experience, through module evaluation forms and the national student survey. The results from these surveys and comments, left by students, on social networking sites reveal that there is a gulf from student expectations and the actual teaching delivery experienced.

The pedagogical elixir appears to have been lost by our fatigued, multi-tasking, poorly resourced academics. This research was driven by a desire to reveal the true nature of an inspired learning experience for students. This is made explicit by the triangulated results (in-depth interviews and a large survey at two universities) that reveal the characteristics that students seek in their tutors. The findings have been categorised into three themes namely: Charisma, Academic skills and Teaching skills (CASTs) to enable tutors to appreciate the areas that they may need to develop to inspire their students.

TRACK: The student experience in the global HE environment: issues of quality, equity and relevance

The lost formulae to inspiring students

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Introduction

Navarro et al. (2005, p.506) highlight that universities are facing numerous challenges, and one of the most relevant is the need to take on the needs of students with a socio-demographic profile that is very different from the one of just a few years ago. It now seems a distant past where only about 5 percent of the population entered post-compulsory education. Today, in the UK, the talk is about no less than 50 percent of the population having at least some experience of higher education (Race, 2005, p.157). Widening participation policies are gradually transforming the spectrum of learners in post-compulsory education. With an increasingly diverse range of students, both economically and academically, it is vital that Higher Education develop a new set of pedagogical tools to engage a generation of students that are socially networked, wirelessly connected and fed on a technological diet of iproducts that have inclined young consumers to expect value and excellence from service providers.

The imperative to improve the learning experience, for students, is vital if universities are to continue to attract more home and international students. Previous research by Ellington and Ross (1994, p.4) revealed that Britain's universities, are coming under increasing pressure to produce tangible evidence of the quality of the teaching which they provide. Especially, when universities are being judged on their teaching and learning through compulsory NSS (National Student Survey) polls and the findings made available to current and future students through league rankings of universities based on student views.

Teaching and Learning

In most universities the emphasis is on teaching, much of which is conducted on a highly cost-effective basis (Frank, 1996, p.4). Whereby, tutors engage students in large groups (Race, 2005, p.130). A whole raft of innovations have been introduced, partly driven by the increase in numbers of students and the consequent need to use resources more efficiently, and partly by a wider and wider recognition of the ineffectiveness of the "traditional" lecture/class/examination mode of teaching. Brown (2005, p. 400) acknowledges that higher education teaching in 2004 is a very different animal from what it was in 1984 or 1994. What was regarded as good teaching yesterday may not engage a digitally savvy, wirelessly networked, information rich and multimedia inclined audience.

There has been much research on understanding the learning styles of students. The Dunn and Griggs (2000) model prescribes that all individuals have a specific leaning style and this differs from person to person, and each person has a learning style preferences. Dunn and Griggs (2003) also argue that students should initially be instructed according to the method best suited for their needs.

Sims and Sims (1991) and Dunn and Griggs (2000) agree that the closer the similarity between students learning style and their teachers teaching style the higher the level of achievement. This strategy of teaching suggests that we focus not only on the content of what is to be learnt, but also on individual learning style, characteristics, which should improve the process of learning.

There are other theories, which suggest that learning styles can be developed and changed, Kolb (1996) notes that learning styles develop as a result of not only inherited or family influences but also of our particular past-life experiences and the demand of our current environment. Learning styles may well represent part of a person's identity but it can be developed and changed. He even goes further and suggests mismatching may be useful so that students could benefit from exposure to a variety of

methods/styles to increase their range of learning. Cotton (2004) criticized Kolb's work for not taking into account cultural factors, age, education experience, socio-economic and other variables. Shaw (2002) established that learning styles may need to change during a person's career.

Valiente (2008, p.86) advocates that there is no right, single and clear way to learn that may apply to everybody and all circumstances. Furthermore, Nielson (2008, p.155) highlights that previous studies have shown that learning styles of university students are not stable over time. This research proposes that a blend of pedagogical delivery may be more effective in engaging students.

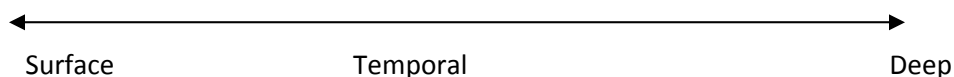
Deep and Surface Learning

The pedagogical landscape has been polarised into deep and surface learning styles. Biggs (1985) found that the surface approach correlated negatively with academic performance – surface approaches have been associated with perceptions of a burdensome workload, poor quality teaching and lack of choice (Entwistle and Ramsden, 1983; Entwistle and Smith, 2002; Prosser and Trigwell, 1997).

Pennington and O'Neil (1994, p.16) advocate that a deep approach to learning is best fostered by teaching and assessment methods that promote active and long-term engagement with learning tasks. Although, Ball (1995, p.19) argues that traditional teaching methods are less likely to facilitate what is called "deep learning", which includes understanding and the application of knowledge, and the development of problem-solving skills. Therefore, designing exercises which place students in real-life experiential learning situations and require them to apply theory to actual industrial circumstances and issues can be immensely valuable to them

The author proposes a continuum (see Figure 1) that students may adapt depending on their interests and motivation to learn a topic. Whereby a student may become a strategic learner and temporarily apply more effort to ensure assessment success.

Figure 1: Continuum of learning



Engaging Lectures

There is a growing body of literature that has identified key behavioral characteristics and pedagogical approaches, that a tutor can adopt, to engage students (see Table 1). Voss and Gruber (2006) conducted a study to develop a deeper understanding of the attributes of an effective teacher that students prefer. They identified a number of attributes namely: (Expert, approachable, good communication skills, friendly, humorous and enthusiastic). These findings are similar to previous study results that indicated the importance of these instructor factors (Patrick and Smart, 1998; O'Toole et al., 2000; Willcoxson, 1998; Westermann et al., 1998). In particular, Hill et al. (2003) found that students want lecturers to be knowledgeable, well-organized, encouraging, helpful, sympathetic, and caring to students' individual needs. Sander et al. (2000) found that students at the beginning of their university life desire lecturers who have good teaching skills and to be approachable, knowledgeable, enthusiastic, and organized. According to Lammers and Murphy (2002) students highly regard, lecturers who are enthusiastic about their subject, inspiring, knowledgeable and helpful. Similarly, Shevlin et al. (2000) mention "lecturer charisma" and Andreson (2000) points out that students desire lecturers who are caring, enthusiastic and strongly interested in the students' progress. Brown's (2004) qualitative study

results indicate that competent lecturers know their subject, are willing to answer questions, are approachable and also have a sense of humor. In addition, they should be flexible enough to explain things in different ways, and to treat students as individuals. The final arbiter for both good and bad teaching will always be students themselves. (Jackson, 2006, p. 386).

Table 1: Engaging student learning

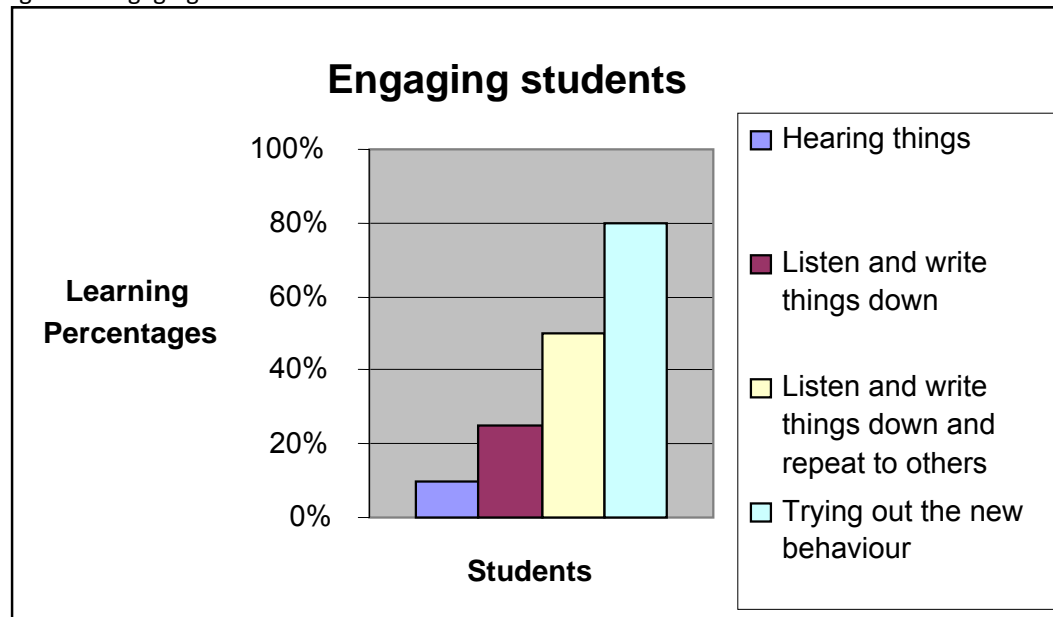
Category	Attributes	Authors
Charisma	Enthusiastic	Jackson 2006, Sander et al. 2000; Lammers and Murphy 2002; Andreson 2000;; Voss & Gruber 2006;
Charisma	Helpful	Hill et al 2003; Lammers and Murphy 2002; Brown (2004)
Charisma	Approachable	Sander et al. 2000, Brown 2004; Voss & Gruber 2006;
Charisma	Listening to students	Ramsden et al 1995;
Charisma	Respect for students	Ramsden et al 1995;
Charisma	Sympathetic	Hill et al 2003;
Charisma	Caring for students (their academic progress)	Hill et al 2003; Andreson 2000; Greiml-Fuhrmann & Geyer 2003;
Charisma	Inspiring	Lammers and Murphy 2002;
Charisma	Treat students as individuals	Hill et al 2003, Brown 2004
Charisma	Communication skills	Voss & Gruber 2006;
Charisma	Friendly	Greiml-Fuhrmann & Geyer 2003, Voss & Gruber 2006
Charisma	Patient	Greiml-Fuhrmann & Geyer 2003
Charisma	Humour	Voss & Gruber 2006; Brown 2004; Greiml-Fuhrmann & Geyer 2003
Academic Skills	Knowledgeable	Hill et al 2003; Sander et al. 2000, Lammers and Murphy 2002; Voss & Gruber 2006; Brown 2004
Teaching Skills	Willing to answer questions	Brown 2004; Greiml-Fuhrmann & Geyer 2003
Teaching Skills	Offering Encouragement	Hill et al 2003; Sandler et al. (2000)
Teaching Skills	Being organized	Hill et al 2003; Sander et al. 2000, Jackson 2006
Teaching Skills	Setting clear goals	Voss & Gruber, Greiml-Fuhrmann & Geyer 2003
Teaching Skills	Offering feedback	Ramsden et al 1995; Race (2005)
Teaching Skills	Application of knowledge to the real world	Brodie & Dorfman 1994
Teaching Skills	Address classroom discipline	Jackson 2006;
Teaching Skills	Good teaching skills	Sander et al. 2000; Brown 2004; Greiml-Fuhrmann & Geyer 2003
Teaching Skills	Change their teaching methods	Brown 2004; Greiml-Fuhrmann & Geyer 2003; Voss & Gruber 2006;

Limitations of Traditional Lectures

Turner's (2006) research into student learning revealed that students need to engage with the lecture to learn (see Figure 2). Freyberg (1956) and Kiewra (1987) found that students taking notes in a lecture

performed significantly better than those who had not, whilst the group who were given the handout did the best of all. To encourage students to take notes Race (2005, p.113) encourages tutors to adopt a Socratic style of questioning students. Although, it is vitally important that tutors allow pauses for notes to be taken, to emphasise key ideas and to give students appropriate handouts. Despite these innovations a pedagogical panacea remains elusive.

Figure 2: Engaging students



Need for Research

There is a contentious debate in academia as to whether good teachers make good researchers (Brown, 2005) and vice versa. Cardinal Newman, whose idea of a university (1854) from a century and a half ago quite clearly excluded the creation of new knowledge through research and insisted that the university simply transmitted existing knowledge efficiently. However, this view would be vehemently opposed today by many leading research universities who see their role to develop new ideas and transmit existing knowledge.

Going back to the 1960s (see, for example, Robbins, 1963) academic literature is full of statements on how it is of the very essence of a university to both teach and research, and how one will suffer without the other. Hughes and Tight (1995, p.51) contend that any institution of higher education worthy of its name should not only have research and teaching take place at the highest level, but they should mutually reinforce and feed off each other. Students are seen as short-changed if they are not learning from lecturers working at the “frontiers of knowledge”; while researchers are hardly worth their salt if they are not regularly reporting back on their latest findings to postgraduates and, increasingly, undergraduates (Hughes and Tight, 1995, p.51). To some extent these views are supported by Brown (2005, p. 393) who advocates that research and teaching are said to go together in an essential, symbiotic way, leading to the further assumption that the good researcher is a good teacher. Although, she warns of the danger of accepting the traditional role of an academic to research is that teachers will continue to feel less valued and will be pressured into undertaking research, with the ironical outcome that they are researching to safeguard their jobs as teachers rather than as a means to improve their teaching (Brown, 2005, p.396).

Methodology

The authors' adopted a triangulated methodology whereby qualitative interviews with 150 students were initially conducted to identify the key themes that students believed contributed to the delivery of a successful lecture. The key findings from the interviews and the literature review were then placed into likert statements, a questionnaire was developed using the QCLICK (Dean, 2008) approach. Initially, the questionnaire was pilot tested with 100 students and the results revealed that minor refinements were needed in the wording. The revised questionnaire was administered to students at both universities in a major city in the North of England to determine their views on delivering effective lectures that aid student learning.

Non-parametric statistical analysis has been applied to the data to reveal a number of statistically significant relationships between variables and differences between the universities. The findings have been categorised into three domains, namely: Charisma, Academic skills and Teaching skills (see Table 1)

Sample

At the end of the administration of the questionnaire a sample of 399 questionnaires were collected, 201 responses came from students from a post-92 university and 198 from an old university. In terms of gender there were 185 males and 214 female responses obtained. There was an equal distribution of students from all years of undergraduate study.

Results

The Cronbach's Alpha for the items in the three segmented categories is .909. The overwhelming majority of variables in the three categories were significantly ranked higher by the male students. Anecdotal evidence would point to the alarming underperformance of male students which could explain their preference for more support from their tutors.

Findings

The results in table 1 clearly show the importance of good teaching skills in aiding the student learning process. Although what is interesting, is the growing importance of a tutors personal nature, that influences acceleration of student learning. In terms of effective teaching methods, that tutors can apply in their classes, there was a consensus of agreement by the students that they preferred a range of traditional pedagogy (PowerPoint presentation), Visual stimulus (Multimedia – videos, animated slides, etc) and Action based learning methods (case study review, group based activities, problem solving, inviting guest speakers to discuss practical application) and online support (podcasts, online exercises) to engage and stimulate the learning environment(see Figure 3).

The findings in Table 2 represent, in ascending order, the importance that students place on each variable when assessing the effectiveness of a tutor in Higher Education.

Table 2: Key themes to enhance student learning

Charisma	Academic skills	Teaching skills
<ul style="list-style-type: none"> • Approachable; • Provide extra help; • Are available outside teaching hours to offer individual tuition; • Have a pleasant and encouraging approach in their communication style; • Build a rapport with students; • Very friendly; • Respect students; • Sympathetic nature; • Have a good sense of humour; • Show enthusiasm for subject; • Inspire students to reach their potential – possess motivational skills; • Reply promptly to Emails; • Take an interest in student progress; • Offer guidance on non-academic issues; • Always punctual. 	<ul style="list-style-type: none"> • Knowledgeable; • Research active; • Have book/journal publications. 	<ul style="list-style-type: none"> • Use different forms of presentation**; • Use examples that relate to student interests; • Vary voice during lecture; • Involve students in lecture through asking questions; • Use animation in presentation; • Lectures are very structured (clear learning goals); • Encourage group discussion; • Use case studies; • Offer guidance on how to prepare for assignments; • Use humour in their lectures to make subject interesting; • Upload notes onto the university's online learning portal; • Provide detailed handouts; • Help groups overcome their difficulties; • Provide reading lists to guide student learning; • Provide regular feedback; • Encourage deep reflection on the subject.

Figure 3: Effective teaching methods

The findings in table 2 highlight the significant differences, in teaching style, between the students from the two universities.

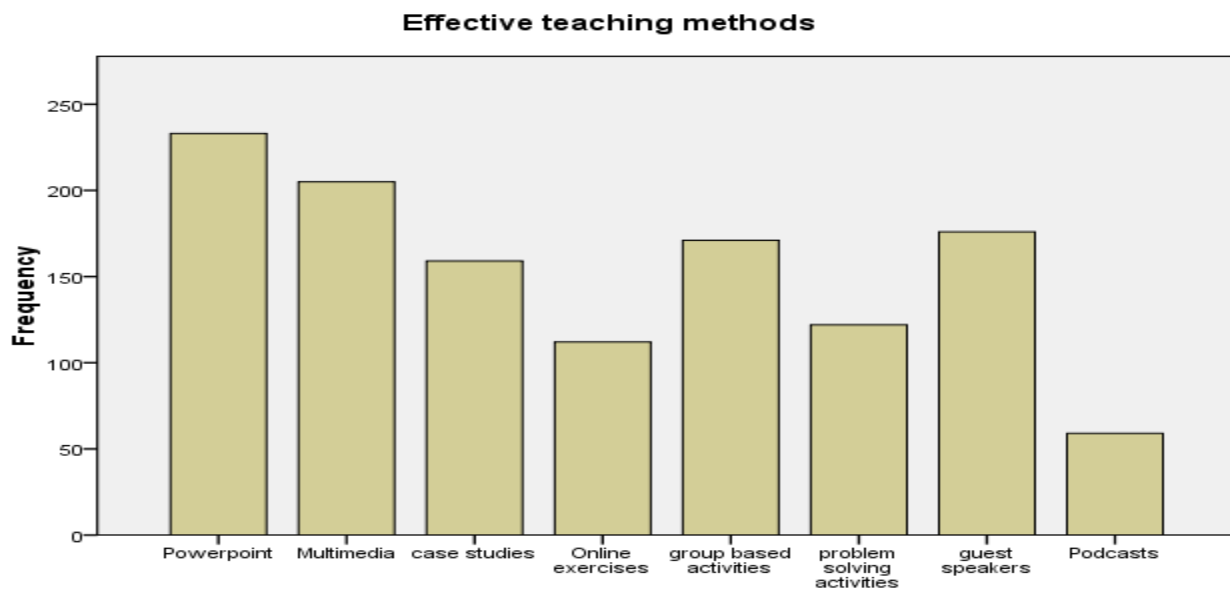


Table 3 Significant differences between the two universities in teaching style

Old University	Category	Post 92 University	Category
Knowledgeable;	Academic	Have a good sense of humour;	Charisma
Provide regular feedback;	Teaching	Very friendly;	Charisma
		Upload notes onto the university's online learning portal;	Teaching
		Use humour in their lectures to make subject interesting;	Teaching
		Involve students in lecture;	Teaching

The results in Table 3 clearly highlight the importance that post 92 university students place on a tutors charisma and teaching style. While learning is not restricted to the lecture environment, this research offers an insight into other environmental, resource, social, etc based factors that may affect student learning.

Other factors that influence the student learning
• Choice of electives
• Cohort of students committed to learning
• Administration that offers reliable student services
• Realistic spread of assessment deadlines
• Modern teaching facilities
• Investment in online learning systems
• Student friendly timetables
• Access to books / Journals and PCs

Discussion

The results from this research clearly highlight the rising popularity of non-traditional academic approaches to enhance the learning experience for students. Students in this sample clearly showed a preference for tutor charisma and the application of a variety of pedagogical techniques to engage students as important to their educational experience. We could speculate that the reasons why these characteristics are important for the students lie in the following:

- Students now see themselves as customers as they are having to pay a tuition fee, and are requiring much higher standards of service from their tutors;
- Most of today's 'igeneration' students have been raised on visually stimulating consumer electronics and are at ease with visually stimulating animated material;
- The rise of social networking and digital communication make the students ideal candidates for supplementary electronic material.

The benefits of pursuing an action based approach to engaging students will aid students appreciate the practical application of theory and help students who wish to pursue an entrepreneurial career gain invaluable skills to ensure the success of their business.

To ensure that universities continue to deliver value to the educational experience to their students will require investment in:

- Universities investing in a series of programmes to make their academic staff aware of the enhanced skills they need to acquire and promote to engage their students;
- Investment in entrepreneurial programmes to capitalise on the talents of their staff and students;
- Allocation of time and resources to aid academics to develop action based learning activities to engage students in the classes;
- New metrics to assess tutors that will need to be triangulated through student feedback, internal moderation and external review;
- Annual monitoring and review of the pedagogical practices of the university to ensure that there is a consistency in delivery;
- Annual monitoring of student views on how tutors can deliver an effective learning experience;
- External partners need to be trained and monitored on the changing preferences of delivering an effective lecture; and
- Resources to fund research interests/activities of academic staff.

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